IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appli	cation of	f:	Blais et al.	Confirmation	on No.: 2136	
Serial	No. 10	/419	024	Art Unit:	2811	
Filed:	April I	7, 20	003	Examiner:	To be assign	ned
For:			NT CONTROLLED YSTEM		ocket No.: 7 1090-012-999	06700-999147 9)
<u>R</u>	EVOCA	ATIC	ON AND POWER OF ATTO	RNEY OR A	AUTHORIZ	ATION OF AGENT
P.O. B	issioner ox 1450 idria, Vi		Patents a 22313-1450			
Sir:						
	D-Wav	e Sy	stems, Inc. (assignee) hereby re	evokes any a	and all previou	as powers and appoints:
\boxtimes	Practiti	ioner	s at Customer Number 20583,	and Brett Lo	ovejoy, Reg. I	No. 42,813
transac	as its/tl t all busi	heir iness	their attorney(s) or agent(s) to in the United States Patent and	prosecute the desired the prosecute the desired the prosecute the prosec	he application Office conne	n identified above, and to
	Please	chan	ge the correspondence address	for the above	e-identified ap	oplication to:
\boxtimes	The above mentioned Customer Number.					
\boxtimes	Practiti	oner	s at Customer Number 20583			
\boxtimes	Firm or	r Indi	vidual Name:			
Addres	s:	<u>Jon</u>	es Day			
		<u>222</u>	East 41st Street			
		Nev	v York, New York 10017			
Telepho	one:	(212	2) 790-2803			
D-Wav	e Systen	App Ass	nc. is the: blicant/Inventor ignee of record of the entire interested the second of the entire interested in the entire in the entire interested in the entire in the entire intereste			
			Statement Under	37 C.F.R. 3	.73(b)	
D-Wave	e Systen	the a	ac. states that it is: assignee of the entire right, title ssignee of less than the entire ri extent (by, percentage) of its o	ight, title and	d interest.	%
in the p	atent app	plica	tion/patent identified above by	virtue of eith	ner:	•
	\boxtimes	An a	assignment from the inventor(s)	of the pater	nt application/	patent identified above

for which a copy thereof is attached.

OR	A ch	A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:					
					rded in the United States Patent and for which a copy thereof is attached.		
			corded in the Frame		d States Patent and Trademark Office on ir which a copy thereof is attached.		
	3. F The	document was re	corded in the Frame		d States Patent and Trademark Office on r which a copy thereof is attached.		
] Addi	itional documents	s in the chain	of title	are listed on a supplemental sheet.		
	[<u>Not</u> origi CFR	e: A separate cop nal document) m	py (i.e., the or ust be submit	iginal ted to	s in the chain of title are attached. assignment document or a true copy of the Assignment Division in accordance with 37 orded in the records of the USPTO. See		
Th	e undersig	ned (whose title	is supplied be	low) i	s authorized to act on behalf of the assignee.		
		ASSI	GNEE: D-W	ave S	ystems, Inc.		
Date:	MAi	R 0 5 2004	_ Signature:				
			Typed Nar	ne:	Geordie Rose		
			Position/T	itle:	Chief Executive Officer		
Note: Signa respresenta	atures of al tive(s) are	Ithe inventors or required. Submit	r assignees of t multiple form	record ns if n	of the entire interest or their nore than one signature is required.		
	f 1 form is	submitted.					

ASSIGNMENT

WHEREAS WE, Alexandre Blais, a citizen of Canada, residing at #3-421 Whitney Ave., New Haven, CT, U.S.A. 06511; A lexandre Zagoskin, a citizen of Canada, residing at 2065 West 8th Ave., Vancouver, British Columbia, Canada, V6J 1W4; and Jeremy P. Hilton, a citizen of Canada, residing at 322-2263 Redbud Lane, Vancouver, British Columbia, Canada, V6K 4V7, A SSIGNORS, are the inventors of the invention in RESONANT CONTROLLED QUBIT SYSTEM for which we have executed an application for a Patent of the United States

which is identified by Jones Day docket no. 706700-999147

which was filed on April 17, 2003, Application No. 10/419,024

and WHEREAS, D-Wave Systems, Inc., organized and existing under the laws of Canada, and having an office for the transaction of business at 320-1985 West Broadway, Vancouver, British Columbia, V6J 4Y3, Canada, ASSIGNEE is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I/WE HEREBY covenant and agree that I/we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, said ASSIGNORS have executed and delivered this instrument to said ASSIGNEE the day and year below written.

Date	, 2004		L.S
Witnessed by:		Alexandre Blais	
Signature		Printed Name	
DateMAR 0 5 2004	, 2004	Alexandre Zagoskin	L.S
Witnessed by: 1255 gc. Signature		M. STEININGER Printed Name	_
Date March 8	, 2004	1	L.S.
Winessed by:	·.	Jenemy P. Hillon	
Signature Fork Wilson		Printed Name	_

ASSIGNMENT

WHEREAS WE, Alexandre Blais, a citizen of Canada, residing at #3-421 Whitney Ave., New Haven, CT, U.S.A. 06511; Alexandre Zagoskin, a citizen of Canada, residing at 2065 West 8th Ave., Vancouver, British Columbia, Canada, V6J 1W4; and Jeremy P. Hilton, a citizen of Canada, residing at 322-2263 Redbud Lane, Vancouver, British Columbia, Canada, V6K 4V7, ASSIGNORS, are the inventors of the invention in RESONANT CONTROLLED QUBIT SYSTEM for which we have executed an application for a Patent of the United States

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NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I/WE HEREBY covenant and agree that I/we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, said ASSIGNORS have executed and delivered this instrument to said ASSIGNEE the day and year below written. 2004 ÉLENE Printed Name Date 2004 Alexandre Zagoskin Witnessed by: Si gnature Printed Name Date 2004 Jeremy P. Hilton Witnessed by: Signature Printed Name

ICATION

NO a

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below at 201 st. seq. beneath my name.

I believe I am the original, first and sole inventor if only one name is listed at 201 below, or an original, first and joint inventor if plural names are listed at 201 at seq. below, of the subject matter which is claimed and for which a patent is sought on the invention entitled:

RESONANT CONTROLLED QUBIT SYSTEM

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is at We arriend	r which a patent application: tached hereto and includes amends a filed in the United States on Apri ment(s) filed on	l 17, 2003 as Application (17, 2003) as Appl	on No. 10/419,024 (for declarate		n) with
l bereb armend	y state that I have reviewed and un ment referred to above.	derstand the contents of	of the above identified application	n, including the claims, as amend	ed by any
i ackno 3 1.56.	owledge the duly to disclose inform	ection known to me to t	oe material to patentability as def	fined in Title 37, Code of Federal	Regulations,
	y claim foreign priority benefits ur ats listed below and have also idea application on which priority is cla		ates Code, §119(a)-(d) of any for n application for patent or inven	reign application(s) for patent or portion of the control of the c	nventor's te before that
	BARLIEST FOREIGN APPLIC	ATION(S), IF ANY, F	ILED PRIOR TO THE FILING	DATE OF THE APPLICATION	1
	APPLICATION NUMBER	COUNTRY	DATE OF FILING (day, month, year)	PRIORITY CLAIMED	
		·		NO 🗆	
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I hereby claim the benefit under Title 35, United States Code, §119(3) of any United States provisional application(s) listed below.

PROVISIONAL APPLICATION NUMBER	FILING DATE
60/374,261	April 20, 2002
60/385,123	May 31, 2002
60/395,704	July 12, 2002

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose information known to me which is material to patentability as defined in Title 35, Code of Pecieral Regulations, §1.56 which became available between the filing date of the prior application and the

NON-PROVISIONAL	FILING DATE				
APPLICATION SERIAL NO.	·	PATENTED	PENDING	ABANDONED	
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	r any patent issuing		it talse statements may jeopan	dize the validity of the	application
	FULL NAME	LASTNAME	PRETNARK		
.	OF INVENTOR	Blais		AUDDEL NAME	
	RESIDENCE &	CIT	Alexandre		•
2	CITIZENSHIP	Nove House		COUNTRY OF CHIZZE	KERIP
0	POST OFFICE	New Haven	Connecticut	Canada	
1	ADDRESS	43 434 14/5/4	1	STATE OF COUNTRY	220 0008
- 1	ADDRESS	#3-421 Whitney Ave.	New Haven	l CT	06511
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	FULL NAME	LAST NAME	FORST NAME	MUDOLE NAME	
- 1	OPINVENTOR	Hilton	Jeremy		•
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- 1	ADDRESS	322-2263 Redbud Lane	Vancouver	British	V6K
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<u> </u>	<u> </u>	118 80	•	Nov- 20	15003
	FULL NAME	CAST NAME O	FIRST NAME	MUSCLE NAME	
	OF INVENTOR	Zagoskin	Alexandre		•
	RESIDENCE &	Carr	STATE OF FOREIGN COUNTRY	COUNTRY OF CITEZEN	
2	CITIZENSHIP	Vancouver			SHIP ————
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3	POST OFFICE	2065 West 8th Ave.		SIVIR ON COOLINIAA	ZZPCODS
1	ADDRESS	2003 Wash 8" AVE.	Vancouver	British	V63
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	FULL NAME	LANDRONE	PIRST NAME	MIDDLE NAME	
	OF INVENTOR			1	
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	OF INVENTOR			MANAGE MANGE	
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1 -		SECULATURE OF INVENTOR			
1	1			DATE	
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P.03/06

As a below named inventor, I hereby do _____hat

My residence, post office address and citizenship are as stated below at 201 et. seq. beneath my name.

I believe I am the original, first and sole inventor if only one name is listed at 201 below, or an original, first and joint inventor if plural names are listed at 201 at seq. below, of the subject matter which is claimed and for which a patent is sought on the invention entitled:

RESONANT CONTROLLED QUBIT SYSTEM

and for which a patent application:	
7 is attached hereto and includes amendment(s) filed on (if amiliants)	
Was filed in the United States on April 17, 2003 as Application No. 10/419,024 (for declaration not accompanying application) with	
smendment(s) filed on (Hermitally)	
7 was filed as PCT International Application With	
7 was filed as PCT International Application No. on and was amended under PCT Article 19 on (if applicable)	
I hereby state that I have reviewed and the demand of the	
I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any	7:
I acknowledge the duty to disclose information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.	
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metably claim foreign priority sensits under Title 35, United States Code, §119(a)-(d) of any foreign application(a) for patent or inventor's settificate below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that	
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PLICATION NUMBER	COUNTRY		PRIORITY
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I hereby claim the benefit under Title 35, United States Code, §119(3) of any United States provisional application(s) listed below.

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	PROVISIONAL APPLICATION NUMBER 60/374.261	
- 1	60/385,123	April 20, 2002
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NON-PROVISIONAL APPLICATION SERIAL NO.	FILING DATE	STATUS			
TOTA BENDER NO.	•	PATENTED	PENDING	ABANDONED	

317138-1